



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,726	03/30/2001	Louis Arquie	K35A0770	5977
25235	7590	03/26/2004	EXAMINER	
HOGAN & HARTSON LLP ONE TABOR CENTER, SUITE 1500 1200 SEVENTEENTH ST DENVER, CO 80202			BAUTISTA, XIOMARA L	
			ART UNIT	PAPER NUMBER
			2173	7
DATE MAILED: 03/26/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/823,726	LOUIS ARQUIE ET AL
	<b>Examiner</b>	<b>Art Unit</b>
	X L Bautista	2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 30 March 2001.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-32 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-32 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 30 March 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 6.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Drawings***

2. New corrected drawings are required in this application because the figures (2-4) include dark shading, which makes the elements in the drawings difficult to read. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: the detailed description of the elements of figure 4 are included in the specification. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**5. Claims 1-13, 15-19, and 21-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Eick et al* (US 6,154,212) and *Bates et al* (US 6,072,490).**

**Claim 1:**

Eick discloses a computer-implemented method for displaying a topology display having multiple connections between network nodes. Eick

teaches displaying nodes representing components in a network, the nodes having two connections to two other nodes in the network. Eick teaches first and second connection paths representing connections to other nodes. Eick teaches curved segments joining nodes in a continuous manner (abstract; col. 1, lines 46-60; col. 5, lines 40-53; figs. 1 & 5). Eick does not teach that the segments overlap with a portion of a second connection path. However, Bates discloses a user interface for displaying linked records with node elements representing individual records and link elements representing the links connecting the nodes. Bates teaches segments that overlap portions of other connection paths (abstract; col. 4, lines 17-37; figs. 2, 15). Therefore, it would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify Eick to include Bates' teaching of segments partially overlapping other segments because it helps the user to perceive or recognize the multiple links connecting the nodes.

Claims 2-6:

See claim 1. Bates teaches vertical and horizontal segments (claim 2); horizontal segments of first connections overlapping horizontal segments of second connections (claim 3); vertical segments of first connections overlapping with portions of vertical segments of second connections (claim 4); first segments connected to a node and overlapping a portion of a

segment of a second connection path (claim 5); and second segments connected to second nodes (claim 6), (figs. 1, 2, 15).

Claims 7 and 31:

See claim 1. Bates teaches a first connection path including a third segment orthogonal to a second segment (fig. 1, 2). Eick/Bates teaches [curved] segments joining a second segment to a third segment in a continuous manner (Bates: fig. 1; col. 20, lines 62-67; Eick: fig. 1; col. 1, lines 50-53).

Claim 8:

See claim 2; Bates teaches displaying second nodes representing second components in the network, wherein a third segment is connected to the second displayed node (figs. 1, 2, 15).

Claims 9, 21 and 26:

See claim 1. Eick teaches highlighting the connection paths in response to user selection (Eick: col. 6, lines 44-51).

Claims 10, 11, 16, 17, 22, 23, 27 and 28:

See claim 9. Eick teaches that visual characteristics such as color and thickness are used to display the node and link attributes (col. 1, lines 56-60). Bates teaches the use of color and shades to distinguish links and nodes (col. 28, lines 53-59).

Claims 12, 18, 24 and 29:

See claim 10. Eick teaches the use of a computer mouse to interact with the network interface on the display (col. 4, lines 56-59).

Claims 13, 19, 25 and 30:

See claim 1. Eick teaches creation and options for user selection of links and nodes (col. 7, lines 32-48). Bates teaches a menu for selection of components for creating a map display (col. 14, lines 15-24).

Claim 15:

See claim 9 and 10. Eick teaches highlighting and user selection of a group of elements (col. 6, lines 44-56).

Claim 32:

See claim 1. Bates teaches that link display elements may take forms such as circles, squares, lines, rectangles and other geometric shapes, and/or icons (col. 10, lines 30-41).

6. **Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eick/Bates and Haggerty et al (US 6,331,983 B1).**

Claim 14:

Eick/Bates does not teach nodes that represent a switch group or a host group. However, Haggerty discloses a method for establishing

connections in a switch-based communication network. Haggerty teaches a network having switch groups and host groups. Thus, it would have been obvious to one having ordinary skill in the art at the time of invention to modify Eick/Bates network display system to include Haggerty's teaching of switch and host groups because the user is enabled to view and examine specific nodes connected to specific hosts or switches for monitoring conditions or status.

**7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Eick/Bates* and *Blumenau et al* (US 6,295,575 B1).**

Claim 20:

Eick/Bates does not teach that the network is a storage area network (SAN). However, Blumenau discloses a data storage subsystem that provides data storage to host processors. Blumenau teaches a graphical user interface (col. 11, lines 36-42), topologies and display of nodes and connections (col. 7, lines 5-50); and multiple hosts (col. 5, lines 23-51). Blumenau explains that a storage area network is an environment where multiple hosts are connected to a storage subsystem, wherein multiple hosts are linked to more than one storage subsystem, and the storage subsystems are linked directly for the transfer of from each host to each storage

subsystem (col. 39, lines 66-67; col. 40, lines 1-19). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Eick/Bates to include Blumenau's teaching of a storage area network because this is a special purpose high-speed network designed to transport database-intensive applications, and enables users to get fast responses; SAN applications include data backup and restoration, data archival and retrieval, data transfer between storage devices, and data sharing between servers.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to X L Bautista whose telephone number is (703) 305-3921. The examiner can normally be reached on Monday-Thursday (8:00-18:00), Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



X L Bautista  
Patent Examiner  
Art Unit 2173

xlb

March 19, 2004